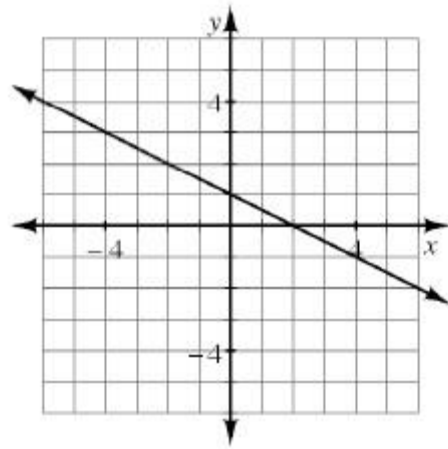


Name: \_\_\_\_\_

Chapter 2 Review

1. For the line graphed at right:

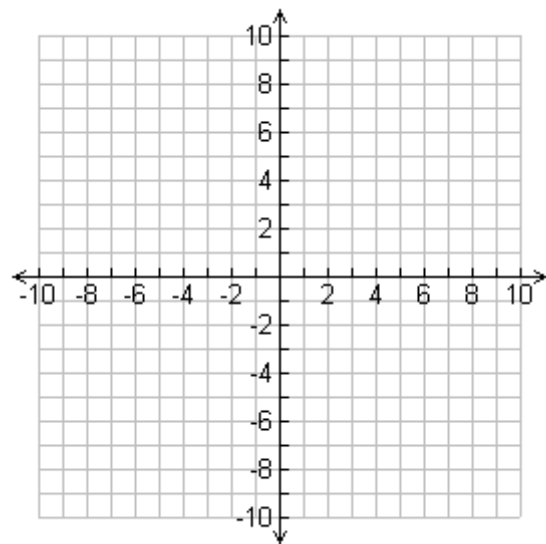
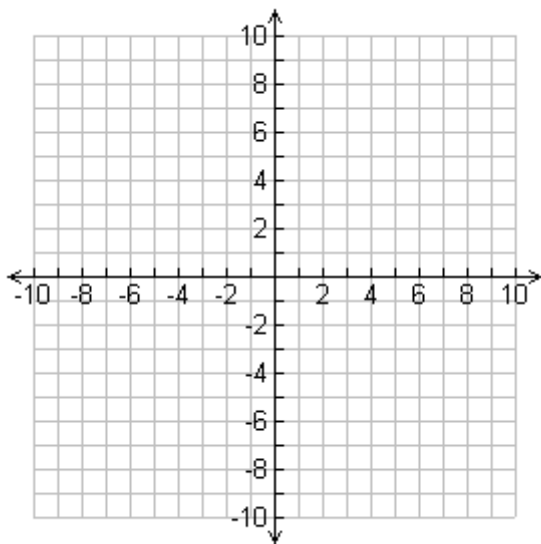
- a. Find the slope.
- a. Find the y-intercept.
- b. Write the equation.



2. Find  $m$  and  $b$  in the following equations. What do  $m$  and  $b$  represent?

- a.  $y = 2x + 1$
- b.  $y = \frac{2}{5}x - 4$

3. Graph each equation in problem 2.



4. Shirley starts with \$85 in the bank and saves \$15 every 2 months. Write an equation for the balance of Shirley's bank account.

5. Find the slope for each linear relation described in the tables below.

a.

x	-2	-1	0	1	2
y	19	14	9	4	-1

b.

x	2	4	6	8	10
y	22	31	40	49	58

6. Write an equation for the given tile pattern. How many tiles will be in figure 58?



Figure 1

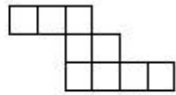


Figure 2

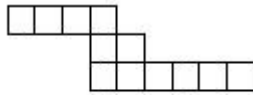


Figure 3

7. Solve for  $w$ :  $6w - 5 + 8w - 2w - 3 = 9w - 24$

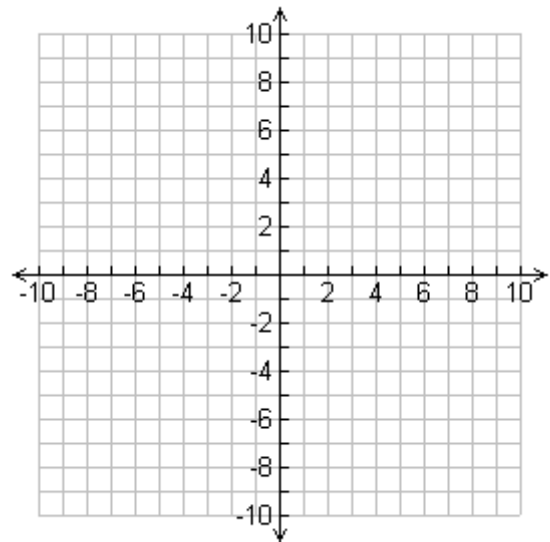
8. Copy and complete the table below for the rule  $y = x^2 - 6x + 5$ . Then graph the rule on graph paper.

x	-1	0	1	2	3	4
y						

a. Completely describe the graph.

b. Is the relation a function?

c. State the domain and range.



9. Find the slope of the line that passes through the points  $(-5, 7)$  and  $(10, 1)$ .

10. Evaluate the expressions below for the given values.

a.  $-3x^2 + 4x + 5$  for  $x = -2$

b.  $6 - (5x - 9)^2$  for  $x = 1$

c.  $\frac{-4}{k+7}$  for  $k = -8$

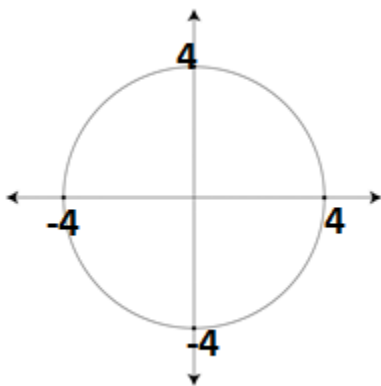
d.  $\frac{2m}{n-1} - m^3 - n$  for  $m = -2, n = 3$

e. If (c) were  $f(k) = \frac{-4}{k+7}$ , what value of  $k$  would be excluded from the domain?

11. Can all relationships between numbers be represented by the equation  $y = mx + b$ ?  
If not, explain what must be true in order for a relation to be represented the linear equation.

12. State the Domain and Range of the following.

a.



b.

